HOMEWORK 2. DUE FRIDAY JANUARY 25

HAND IN:
6.2.2, 6.2.3, 6.2.8, 6.2.10, 6.2.11, 6.2.14, 6.2.15.

AND:

1. DEFINE the direct product $A_1 \times A_2 \cdots \times A_n$ of rings $A_1, ..., A_n$; prove that you indeed defined a ring.

2. Let $\mathbb{H}$ be the division ring of quaternions and Q be the quaternion group of order 8. Construct a surjective ring homomorphism $\mathbb{R}Q \to \mathbb{H}$ and prove that this is indeed a homomorphism.

DO NOT HAND IN:

6.2.1, 6.2.4, 6.2.5, 6.2.7, 6.2.9, 6.2.13, 6.2.16, 6.2.19.